

Amendments of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Previously Presented) A device having a contact interface for establishing an electrical connection with an electrical component, said contact interface comprising:
 - a loading fiber;
 - a first conductor and a second conductor, each of said first and second conductors having at least one contact point, wherein said first and second conductors are coupled to said loading fiber;
 - a tensioning guide disposed between and mechanically separate from said first and second conductors, wherein said loading fiber is in contact with said tensioning guide when said device is engaged with said electrical component; and
 - wherein an electrical connection is established between said at least one contact point of each of said first and second conductors and said electrical component when said device is engaged with said electrical component.
2. (Original) The device of claim 1, wherein said device comprises a burn-in socket device.
3. (Original) The device of claim 1, wherein said device comprises a test socket device.
4. (Original) The device of claim 1, wherein said device comprises a circuit board.

5. (Original) The device of claim 1, wherein said device comprises at least one of the following: a processing unit, a memory unit or an expansion card.

6. (Currently Amended) The device of claim 1, wherein electrical connections ~~can be~~ are established between said device and a plurality of electrical components.

7. (Cancelled)

8. (Previously Presented) The device of claim 1, wherein said tensioning guide is comprised of a support column.

9. (Previously Presented) The device of claim 1, wherein said tensioning guide is comprised of a faceplate.

10. (Previously Presented) The device of claim 1, wherein at least one of said first and second conductors is woven with said loading fiber.

11. (Previously Presented) The device of claim 1, wherein at least one of said first and second conductors comprises a shaped contact and a conductive lead.

12. (Previously Presented) The device of claim 1, wherein said loading fiber is one of a plurality of loading fibers, said plurality of loading fibers forming a grid having a plurality of intersections and wherein at least one of said first and second conductors is coupled to said loading fiber at or near an intersection of said grid.

13. (Previously Presented) The device of claim 1, wherein said loading fiber is one of a plurality of loading fibers, said plurality of loading fibers forming an array having at least two

layers of loading fibers and wherein at least one of said first and second conductors is coupled to a loading fiber of a first layer of said array and to a loading fiber of a second layer of said array.

14. (Previously Presented) The device of claim 1, wherein said loading fiber is comprised of a non-conducting material.

15. (Previously Presented) The device of claim 1, wherein said loading fiber is comprised of an elastic material.

16. (Previously Presented) The device of claim 1, wherein said loading fiber is comprised of at least one of the following: nylon, fluorocarbon, polyaramids, polyamids, conductive metal or natural fiber.

17. (Previously Presented) The device of claim 1, wherein at least one of said first and second conductors has a diameter between approximately 0.0002 and approximately 0.0100 inches, inclusive.

18. (Previously Presented) The device of claim 1, said contact interface of said device further comprising:

an insulator disposed between said first conductor and said second conductor to electrically isolate said first conductor from said second conductor.

19. (Previously Presented) The device of claim 1, said contact interface of said device further comprising:

at least one tensioning spring; and

wherein an end of said loading fiber is coupled to said at least one tensioning spring.

20. (Previously Presented) The device of claim 1, said contact interface of said device further comprising:

at least one floating end plate; and

wherein an end of said loading fiber is coupled to said at least one floating end plate, and wherein a portion of said electrical component engages said at least one floating end plate when said device is engaged with said electrical component.

21. (Previously Presented) The device of claim 1, further comprising:

a high-frequency modulator that is coupled to said loading fiber, wherein said high-frequency modulator is capable of exciting said loading fiber at a fundamental frequency.

22. (Currently Amended) A device having a contact interface for establishing electrical connections with an electrical component, said contact interface comprising:

a plurality of loading fibers;

a plurality of conductors, wherein each conductor is coupled to at least one loading fiber;

a plurality of rigid tensioning guides, wherein a tensioning guide is disposed on at least one side of each conductor, and wherein at least a portion of said plurality of loading fibers contact said plurality of tensioning guides when said device is engaged with said electrical component; and

wherein electrical connections ~~[[is]]~~ are established between at least a portion of said plurality of conductors and said electrical component when said device is engaged with said electrical component.

23. (Original) The device of claim 22, wherein said device comprises a burn-in socket device.

24. (Original) The device of claim 22, wherein said device comprises a test socket device.

25. (Original) The device of claim 22, wherein said device comprises a circuit board.

26. (Original) The device of claim 22, wherein said device comprises at least one of the following: a processing unit, a memory unit or an expansion card.

27. (Currently Amended) The device of claim 22, wherein said electrical component comprises a plurality of contacts, and wherein electrical connections ~~can be~~ are established between at least a portion of said plurality of conductors and said plurality of contacts of said electrical component when said device is engaged with said electrical component.

28. (Original) The device of claim 27, wherein said plurality of contacts of said electrical component comprises a ball grid array.

29. (Original) The device of claim 27, wherein said plurality of contacts of said electrical component comprise a surface mount array.

30. (Original) The device of claim 27, wherein said plurality of contacts of said electrical component comprises a pin grid array.

31. (Cancelled)

32. (Previously Presented) The device of claim 22, wherein tensioning guides are disposed on two sides of each conductor.

33. (Previously Presented) The device of claim 22, wherein said plurality of tensioning guides are comprised of a plurality of support columns.

34. (Previously Presented) The device of claim 22, wherein said plurality of tensioning guides form a grid structure comprised of a plurality of high-tensioned fibers.

35. (Original) The device of claim 22, said contact interface of said device further comprising:

a plurality of tensioning springs; and

wherein each loading fiber is coupled to a tensioning spring.

36. (Original) The device of claim 22, said contact interface of said device further comprising:

at least one floating end plate; and

wherein an end of each loading fiber is coupled to said floating end plate.

37. (Currently Amended) A device for testing the electrical integrity or functionality of an electrical component, said device comprising:

at least one loading fiber;

a plurality of conductors, wherein each conductor is coupled to at least one loading fiber;

a plurality of rigid tensioning guides, said plurality of tensioning guides being disposed on at least one side of each said conductor;

wherein electrical connections ~~[[is]]~~ are established between at least a portion of said plurality of conductors and said electrical component when said device is engaged with said electrical component; and

wherein at least a portion of said at least one loading fiber contacts said plurality of tensioning guides when said device is engaged with said electrical component.

38. (Original) The device of claim 37, wherein said device comprises a burn-in socket device.

39. (Original) The device of claim 37, wherein said device comprises a test socket device.

40-53. (Cancelled)